




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,096	02/26/2002	Helmar Haug	28605/37074A	8033
7590	03/23/2004		EXAMINER	
Carl E. Moore, Jr. MARSHALL, GERSTEIN & BORUN 6300 Sears Tower 233 South Wacker Drive Chicago, IL 60606-6402			BELL, BRUCE F	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 03/23/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/083,096	Applicant(s) HAUG ET AL. 	
	Examiner Bruce F. Bell	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 15-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/783228.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1746

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities:

Claim 15 is objected to with respect to the terms "main groups III, IV and groups 4-7 of the periodic system. Applicant's are reminded that there are these same groups in the old periodic tables with the designations A and B. Therefore, applicants' need to differentiate between whether they are instantly claiming groups IIIA or IIIB, IVA or IVB, and whether the groups 4-7 are with respect to groups 4-7A or 4-7 B. In either case, the use of both roman numerals and Arabic numerals is inappropriate. The examiner in charge of this application suggests that applicants' use the new nomenclature for the periodic table having groups 1-16, to show the elements that may be used in the instant claims. The examiner based on applicant's instant specification realizes that the elements for use in the applicants' instant invention are the transition metal elements and has examined the application as such.

Appropriate correction is required.

Allowable Subject Matter

2. Claims 15-18 are allowable over the prior art of record.
3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach and/or suggest a procedure for the electrolytic dissolution of water using a bipolar electrode having a body of an element from main groups III and IV (transition metals) of the periodic table,

Art Unit: 1746

coated with a semiconductor material coating made from elements in groups 4-7 (transition metals) of the periodic table, wherein upon insertion of the bipolar electrode into an electrolyte solution, the electrolyte pH is adjusted to between 13-14 and a direct current voltage is applied to the bipolar electrodes while continuously circulating the electrolyte and discharging the gases (Hydrogen and Oxygen) evolved at the electrodes are removed by gas lines to a receiving area and stored.

Conclusion

4. This application is in condition for allowance except for the following formal matters:

Correcting the terminology used in the instant claim 15 with respect to the periodic table groups as set forth above in the objection to the claims.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571 272-1302.

Art Unit: 1746

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BFB
March 17, 2004


Bruce F. Bell
Primary Examiner
Art Unit 1746